cache and placing it in the decoded frame cache; and

(iv) using at least one of the decoded frames in the frame dependency to decode the particular frame to create a decoded version of the particular frame.

2. The method of claim 1, wherein the request to playback a particular frame is part of a request to perform frame-by-frame backward playback and part (b) is performed for successively earlier frames with respect to the particular frame as part of the frame-by-frame backward playback.

3. The method of claim 1, wherein part (i) is performed whether or not it is determined that a decoded version of a particular frame is in the decoded frame cache without part (iv) being performed.

4. The method of claim 1, wherein the particular frame may be an I, P, or B frame of MPEG compressed video.

5. The method of claim 1, wherein the frame dependency is an immediate frame dependency.

6. The method of claim 5, wherein the at least some of the decoded frames referred to in part (a) (iv) are those frames in the immediate dependency.

7. The method of claim 5, wherein part (b) includes recursion where frames in the immediate frame dependency of the frame of interest are not in the decoded frame cache.

8. The method of claim 1, wherein part (b) includes a loop with a terminating condition that all frames on which the particular frame is dependent have been decoded.

9. The method of claim 1, wherein decoded frames are replaced in the decoded frame cache according to a least recently used policy.

10. The method of claim 1, wherein an index is used to represent each frame in the frame dependency.

11. The method of claim 1, wherein the frame dependency is determined through a look-up table.

12. The method of claim 11, wherein the frame dependency is determined through successive uses of a look-up table.

13. The method of claim 1, wherein the decoded frame cache includes a data structure.

14. The method of claim 1, wherein the decoded frame cache includes a section of main memory.

15. (Amended) An article comprising:

a computer readable medium having instructions thereon which when executed cause a computer to:

(a) detect a request to playback a particular frame; and

(b) determine whether a decoded version of the particular frame is in a decoded frame cache, and if it is not and if the particular frame has a frame dependency:

    (i) determine a frame dependency for the particular frame;

    (ii) determine which of the frames in the frame dependency are in the decoded frame cache;

    (iii) decode any frame in the frame dependency that is not in the decoded frame cache and place it in the decoded frame cache; and

    (iv) use at least and of the decoded frames in the frame dependency to decode the particular frame to create a decoded version of the particular frame.

16. The article of claim 15, wherein the request to playback a particular frame is part of a request to perform frame-by-frame backward playback and part (b) is performed for successively earlier frames with respect to the particular frame as part of the frame-by-frame backward playback.

17. The article of claim 15, wherein part (i) is performed whether or not it is determined that a decoded version of a particular frame is in the decoded frame cache without part (iv) being performed.

18. The article of claim 15, wherein the frame dependency is an immediate frame dependency.

19. The article of claim 18, wherein the at least some of the decoded frames referred to in part (a) (iv) are those frames in the immediate dependency.

20. The article of claim 18, wherein part (b) includes recursion where frames in the immediate frame dependency of the frame of interest are not in the decoded frame cache.

21. The article of claim 15, wherein part (b) includes a loop with a terminating condition that all frames on which the particular frame is dependent have been decoded.

22. The article of claim 15, wherein decoded frames are replaced in the decoded frame cache according to a least recently used policy.